

Appl. No. 10/526,427  
Amdt. Dated June 23, 2008  
Reply to Office Action of April 11, 2008

Attorney Docket No. 81864.0053  
Customer No.: 26021

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended): A ferrite material comprising a sintered body comprising as main constituents, 62 to 68 mol % of  $\text{Fe}_2\text{O}_3$ , 15 42 to 20 mol % of  $\text{ZnO}$ , 1.5 to 5 mol % of  $\text{NiO}$ , and the balance being substantially  $\text{MnO}$ ; and

the saturation magnetic flux density thereof at  $100^\circ\text{C}$  is 450 mT or more (magnetic field for measurement: 1194 A/m), and the minimum core loss value thereof is  $1200 \text{ kW/m}^3$  or less (measurement conditions: 100 kHz, 200 mT), wherein:

said sintered body has a mean grain size of 10 to  $30 \mu\text{m}$ .

2.-4. (Cancelled).

5. (Previously presented): The ferrite material according to claim 1, wherein: said ferrite material comprises, as additives, 250 ppm or less (not inclusive of 0) of Si in terms of  $\text{SiO}_2$  and 2500 ppm or less (not inclusive of 0) of Ca in terms of  $\text{CaCO}_3$ .

6. (Cancelled).

7. (Previously presented): The ferrite material according to claim 5, wherein: the weight ratio between said content of  $\text{SiO}_2$  and said content of  $\text{CaCO}_3$  ( $\text{SiO}_2$  content/ $\text{CaCO}_3$  content) is 0.04 to 0.25.

8. (Currently amended): The ferrite material according to claim 1, wherein: said ferrite material comprises, as additives, one or more selected from the group consisting of  $\text{Nb}_2\text{O}_5$ : 400 ppm or less (not inclusive of 0),  $\text{ZrO}_2$ : 1000 ppm or less (not inclusive of 0),  $\text{Ta}_2\text{O}_5$ : 1000 ppm or less (not inclusive of 0),  $\text{In}_2\text{O}_3$   ~~$\text{In}_2\text{O}_5$~~ : 1000 ppm or less (not inclusive of 0), and  $\text{Ga}_2\text{O}_3$   ~~$\text{Ga}_2\text{O}_5$~~ : 1000 ppm or less (not inclusive of 0).

9. (Previously presented): The ferrite material according to claim 1, wherein:  
said ferrite material comprises, as additives, one or both of  $\text{SnO}_2$ : 10000 ppm or less (not inclusive of 0) and  $\text{TiO}_2$ : 10000 ppm or less (not inclusive of 0).
10. (Previously presented): The ferrite material according to claim 1, wherein:  
said ferrite material comprises, as additives, one or more selected from the group consisting of a P compound: 35 ppm or less (not inclusive of 0) in terms of P,  $\text{MoO}_3$ : 1000 ppm or less (not inclusive of 0),  $\text{V}_2\text{O}_5$ : 1000 ppm or less (not inclusive of 0),  $\text{GeO}_2$ : 1000 ppm or less (not inclusive of 0),  $\text{Bi}_2\text{O}_3$ : 1000 ppm or less (not inclusive of 0), and  $\text{Sb}_2\text{O}_3$ : 3000 ppm or less (not inclusive of 0).
11. (Previously presented): The ferrite material according to claim 1, wherein:  
the bottom temperature at which the core loss thereof exhibits the minimum value falls within a range between 60 and 130°C.
12. (Previously presented): The ferrite material according to claim 1, wherein:  
the saturation magnetic flux density thereof at 100°C is 480 mT or more (magnetic field for measurement: 1194 A/m).
13. (Original): The ferrite material according to claim 12, wherein:  
the initial permeability thereof at room temperature is 700 or more.
14. (Currently amended): The ferrite material according to claim 1, wherein:  
said sintered body has a relative density of 93% or more ~~and a mean grain size of 5 to 30  $\mu\text{m}$ .~~
15. (Previously presented): The ferrite material according to claim 1, wherein:  
the saturation magnetic flux density thereof at 100°C is 480 mT or more (magnetic field for measurement: 1194 A/m) and the minimum core loss value thereof is 1100  $\text{kW/m}^3$  or less (measurement conditions: 100 kHz, 200 mT).

16. (Previously presented): The ferrite material according to claim 1, wherein:  
the saturation magnetic flux density thereof at 100°C is 500 mT or more  
(magnetic field for measurement: 1194 A/m), the minimum core loss value thereof is  
1000 kW/m<sup>3</sup> or less (measurement conditions: 100 kHz, 200 mT), the bottom  
temperature at which the core loss thereof exhibits the minimum value is from 80 to  
120°C, and the initial permeability thereof at room temperature is 800 or more.

17. (Cancelled):

18. (Previously presented): The ferrite material according to claim 1, wherein:  
said sintered body has a mean grain size of 10 to 20 μm.